DHCD

Summer 2005

Code CONNECTION

Plans, Priorities and Actions

By Emory Rodgers, Deputy Director, Division of Building and Fire Regulation

How time flies when you are having fun. The adage fits nicely for me as the past six months have seemed to race by for me just like it was yesterday.

There were the little, but important, nuts and bolts of day-to-day activities that every new manager needs to familiarize themselves with. There have been numerous staff meetings to discern where we are and where we need to be and to prepare a two-year departmental strategic plan and budget that involves revising and planning what initiatives the Building and Fire Regulation Division will undertake over the next several years.

Certainly, high on the list of priorities will be completing the 2003 Uniform Statewide Building Code, the Statewide Fire Prevention Code regulatory process, and the associated statewide mandatory training for code enforcers. More about the code update training will be available on the DHCD web-site and distributed through the homepages of our client groups. Generally, we are planning at least 2 training teams and 10-12 sites for the administrative provisions and the same for the technical updates for the referenced model codes and standards. Training will commence in July and continue through December. All code enforcers will be expected to complete the mandated and required training by the end of 2005. There will be some special training classes for the new International Existing Building Code. Other specialized training is being considered for the IRC wall bracing requirements and the IBC accessibility requirements. The design community, developers/builders, trade contractors and building owners, will be invited to attend the training sessions for existing buildings and for all other training as seats are available at each site.

Our commitment to having our clients participate in the regulatory process through standing advisory committees and work groups or ad hoc committees that the division, or the Board of Housing and Community Development appoints remains one of our highest priorities. In fact some of you have already asked about when we will start the 2006 USBC/SFPC regulatory process. I am not prepared to say what that date will be as the Board of Housing and Community Development must approve the schedule. However, comparative evaluations can commence early next year between the 2003 and 2006 ICC model codes and standards. The BHCD may also direct staff to study carry over technical and administrative issues from the 2003 regulatory process.

The BFRD is trying earnestly to keep up with the ever-increasing technology advancements now available to assist the State Fire Marshal Office perform their inspection duties and to enable the Training and Certification Office to track the employment status for code enforcement personnel, to track certificate holders and to automatically register and verify attendance at training programs for code officials and technical assistants. Included in this Code Connection is an article on the

Inside this issue

Automation Initiatives @ TCO

By Sharon Smith and Daniel Y. Gilham, DHCD Training and Certification Office

An automation initiative currently under development by the DHCD Training and Certification Office is an Internet-based version of our existing TCO Tracking System. The purpose of this Internet-based initiative is to provide TCO with the capability to provide for on-line record keeping pertinent to the training, certification, and employment status of code enforcement personnel. By August 2005, it is projected that code enforcement personnel will be able to use the Internet to sign-in and view their training records and certification status. By September 2005, it is projected that code enforcement personnel will also be able to use the same Internet-based system to view upcoming Code Academy classes and to register online. Another application,

tracking systems to be implemented by the Training and Certification Office. One of the real benefits of this new automation is that I will be sending letters to the county/city managers, attorneys and boards of the localities where our records indicate the code officials and technical assistants have not completed their certification requirements. It is paramount that the code officials and technical assistants, conducting enforcement activities under the USBC or the SFPC, have the proper certifications so as to avoid possible sanction provisions applicable under the Virginia Certification Standards.

Two other high priorities include the replacement throughout Virginia of all defective Tyco o-ring sprinklers that can be replaced free of charge under a voluntary replacement program approved by the Consumer Product Safety Commission. The State Fire Marshal's office is taking the lead in this effort. The 2nd initiative being carried out by the SFMO is the inspection of high-risk occupancies such as nightclubs, private colleges, private hospitals and private secondary schools. The 2004 General Assembly approved the inspections of these high-risk occupancies and allocated staff to conduct the inspections along with approval of charging an inspection fee. The SFMO also plans to increase the permit fees for fireworks displays. The SFMO will be providing updates and working with the client groups in each of these endeavors.

The Code Connection is one of our primary means to communicate. This is my personal call for our clients to submit articles for publication. I have asked the Building and Fire Regulation Division staff to submit articles that could include from the State Technical Review Board a quarterly summary of the appeal cases and interpretations; informal staff opinions on the latest

interpretation issue being discussed around the state; news and training opportunities from the Building Code Office on manufactured housing and industrialized buildings; and, from the Building Code Academy Advisory Committee the status and progress on long-range planning, proposed continuing education requirements, approval for new certifications, proposed revisions in the sanction provisions, and providing comments to the BHCD on 3rd party qualification requirements. What are some of your suggestions that staff might research and publish in the Code Connection? Let us hear from you.

As you can see, we have a full plate and there is a 2nd tier group of projects that we are undertaking from development of a permit technician's training module to proceeding with regionalization of some components of our technical modules and specialized training courses.

You will continue to hear from me the message that what remains as our 1st priority is providing effective and exemplary customer service and seeking your feedback individually or through your associations.

On a personal note, I want to say thanks to all our staff and clients who have pledged their support and assistance to make all aspects of what we do in code enforcement even better. Without our valued clients, who have dedicated hundreds of hours, without reimbursement, we would be unable to promulgate what I and many others consider being the best set of statewide building and fire codes in the nation.

Three Transformational Leaders: Guy, David, and Jim

Interviews Coordinated by Daniel Y. Gilham, Manager, DHCD Training and Certification Office

Introduction: This is another in a series of interviews with Code Academy Instructors. In this article, three instructors are interviewed who led the way in transforming Code Academy training in their disciplines. In a word, these are the great transformers, the individuals who led the change from the traditional Academy code "reading sessions" to the current highly effective task-based, job-based training sessions in the disciplines of *1) Mechanical inspection training; 2) Electrical inspection training; and, 3) Plumbing inspection training*.

Guy Tomberlin: Mechanical Inspection Training

Background: Guy Tomberlin has worked in code enforcement since 1985. He has served in many capacities including residential and commercial inspector, commercial mechanical inspection supervisor, and is currently the chief plumbing inspector for Fairfax County. In addition, Guy develops and delivers training programs relating to the plumbing, mechanical, and fuel gas codes, both commercial and residential. He provides training not only in Fairfax and throughout Virginia, but in other states for certified engineers, inspectors, plan reviewers, contractors, and other members of the building community. Guy is currently the second Vice-President of the Virginia Building and Code Officials Association (VBCOA). He has served VBCOA as the mechanical code committee chairperson for several years and currently serves on that committee, co-chairs a USBC ad hoc committee that deals with administrative issues, and served on the nominations committee. He is a past President of the Virginia Plumbing and Mechanical

Inspectors Association (VPMIA). In addition, Guy has served ICC (and previously BOCA) on mechanical code development committees and interpretation committees and during the last code cycle served on the plumbing code development committee.

Code Connection (CC) Interview Questions

CC: How did you get started in the construction and code enforcement arenas?

Guy: I started as a plumber, HVAC, and gasfitter in the new construction field in the early 1980's. The majority of my work was related to larger commercial projects, such as schools and office buildings. In addition, I performed some residential installations. While attending the plumbing apprenticeship program in 1985, one of my instructors told me about a job opening in Fairfax County. I applied and was hired to serve as a senior plumbing inspector. I performed commercial plumbing inspections until 1995 when I transferred into the Fairfax County residential combination inspection program. I served in that capacity for about 2 years. I then accepted the position of commercial mechanical supervisor, where I served for approximately 5 years. Currently, I serve as the chief plumbing inspector for Fairfax County, and I have served in that position for the past 3 years.

CC: What got you interested in teaching for the Code Academy?

Guy: I assisted with a code update/change seminar around 1988 with our chief plumbing inspector and a plumbing inspector from Arlington County. The first seminar was at a VPMIA annual school of instruction. It was about the

Automation Initiatives @ TCO *(continued from page 2)*

currently in the testing phase, is expected to speed up the sign in process for students at Code Academy training modules. More specifically, this application will allow participants to enter their personal identification code (DLN) into a laptop at the on-site training registration desk and click "Sign-In". By doing this, a student's participation in the course will be entered into the laptop and the TCO training database will be automatically updated. When the current automation initiatives are completed, individuals will be able to sign-in quickly at the training site, and will be able to use the Internet to:
• View upcoming Code Academy classes
• Register on-line
• View their training records and certification status

Stay tuned, the next stage of TCO's initiatives will address the automation of records for a voluntary continuing education program.

time Virginia was adopting the 1987 model codes. In our seminar, we went over all the major differences between the CABO and BOCA codes. I think there were about 25 comparative items. It was amazing. What an eye opener! This was my first exposure to discussions with code professionals from all over the state. I think I probably enjoyed the seminar more than anyone there. It was at this time that I realized the importance of uniformity in code interpretation and application. This seminar experience really got me motivated to teach and advance a better understanding of the codes we use everyday. From there, I went on to conduct seminars for inspectors, plan reviewers, contractors and anyone who wanted any type of code training. Currently, I travel to various states outside Virginia and conduct seminars for ICC. I have been doing these ICC seminars since the late 90's.

CC: When did you start teaching for the Code Academy?
Guy: I believe it was the early 1990's, but I am not exactly sure; it all has seemed like a natural progression. I did another series of code updates for Virginia's adoption of the 1990 model codes with our chief plumbing inspector and another supervisor (Jim Moore) at the county. By the mid to late 90's, we were developing much more advanced training for what we call now the "Technical Modules". This was the start of something much bigger. This type of training is more task-based, job-focused, and better suited to deal with the issues that the industry needs to gain consensus on, issues that might otherwise go on being misinterpreted and misapplied. It is impressive to see the benefits of the code academy training today. I have been in code enforcement long enough to remember when training used to consist of "this is what changed" and that's all! Now we instruct "this is what changed" and go into exactly why it changed while incorporating the inspector/plan reviewers role in the enforcement process.

CC: What have you taught for the Code Academy?
Guy: I have provided instruction for plumbing, mechanical, and the fuel gas codes, both commercial and residential. I have instructed Technical Modules and Code Updates. Audiences have included building officials, inspectors, plan reviewers, architects, engineers, contractors, other organizations such as ASHRAE, ASPE, PMPV, PHCC, Home Builders, and so forth.

CC: What do you consider to be the most important elements that you incorporate into your teaching?
Guy: Customer Service! No matter how you cut it, that's the business we are in. I always start out with that

statement. Before we ever get into the code applications, I make sure everyone understands why we are in this business. We are here for the health, safety, and welfare of the public, the citizens of Virginia. I always start with this basic concept. Everyone has had something delivered to their home at sometime or another. Did they show at the time they told you? Did they deliver what you ordered? Were they professional and friendly? This is exactly what we do. We deliver a service and I place great emphasis on giving the same type of service that we would like and expect in any other areas of our personal life. This concept tends to get folks thinking and starts seminars off on an even playing field. In my teaching, I use real life experience and examples. Whether I'm instructing a course to contractors and describing the installations that I once performed, or a class to inspectors/plan reviewers detailing design and installations I have reviewed/inspected, or a course to architects and engineers explaining the piping systems in a complex project such as a hospital, I am never afraid to use the mistakes I have made as good examples of bad examples. Adaptability to the audience is the key to a successful seminar. I always gear the courses towards an open forum, giving everyone the opportunity for an even exchange. I get as much from the discussions as the participants. Understanding of the codes, their applications and interpretations are the main focus I attempt to incorporate into all discussions. Diversity is great. I think being able to travel to other states and jurisdictions, listening to other applications/situations from many different sources really enables a greater perspective and appreciation of the application of the codes.

CC: What keeps you interested and motivated to teach for the Code Academy?
Guy: The codes change every 3 years. I think it is extremely important to get the new up to date material to the people who use it everyday. A better educated community is vital for uniform application of the codes. The codes we enforce are the minimum safety standards designed and adopted to protect the safety of the citizens of Virginia. Everyone needs to be aware of this important information in order to utilize these provisions to their advantage and create a safe built environment. I enjoy the challenge to stay current. Our role is always changing as technology progresses. I feel it is important to stay current with the industry we are part of and incorporate these changes in the training courses I deliver.

CC: What advice would you give to individuals who have

just started to teach or aspire to teach for the Code Academy?

Guy: Stay focused on good customer service skills and the code! That is what we are here for. The code says the same thing for everyone who uses it. Remain open minded and amenable to others and their points of view. Strive to promote "uniformity" across the Commonwealth of Virginia in code interpretation and application.

David G. Humphrey: Electrical Inspection Training

Background: David G. Humphrey began his career in the electrical trade in June 1978. He worked as an electrician until March 1988 when he became an inspector for the County of Henrico. David has served as the Senior Electrical Inspector for the County of Henrico from 1995 to the present. David holds the following credentials: Journeyman Electrician, Master Electrician, One and Two Family Dwelling Electrical Inspector, Electrical Inspector General, Electrical Plans Examiner, Mechanical 1and 2 Family Dwelling Inspector, Amusement Device Inspector, Advanced Instructor Virginia Building Code Academy. His teaching experience includes 1989 –2004, Senior Instructor VECAP Apprentice Program, Seminar Instructor Associated Builders and Contractors, Instructor Virginia Chapter IAEI, and Electrical Instructor Virginia Building Code Academy. His organizational and technical leadership positions include 1987-1988, President - West End of Richmond Junior Chamber of Commerce; 1989-2004, Senior Instructor - Virginia Electrical Contractors Association Apprentice Program; 1999-2002, Chairman Electrical Committee- Virginia Building Code Officials Association; 1999-Present, Electrical Committee Member-National Certification Program for Construction Code Inspectors; 2003-2004, President - Virginia Chapter

International Association of Electrical Inspectors; 2005-Present, Principal Member, NFPA 70 (National Electrical Code) Code Making Panel 8.

Code Connection (CC) Interview Questions

CC: How did you get started in the construction and code enforcement arenas?

David: From childhood, electricity has always held a fascination for me. Becoming an electrician was a goal from my early teenage years. In High School, I entered the VO-Tech electrical program and began my apprenticeship upon graduation in 1978. Code enforcement became an interest of mine from working with the inspectors in Henrico County, who I found to be both knowledgeable and professional. Becoming an Inspector seemed like the best way to broaden my knowledge and expertise within the electrical trade.

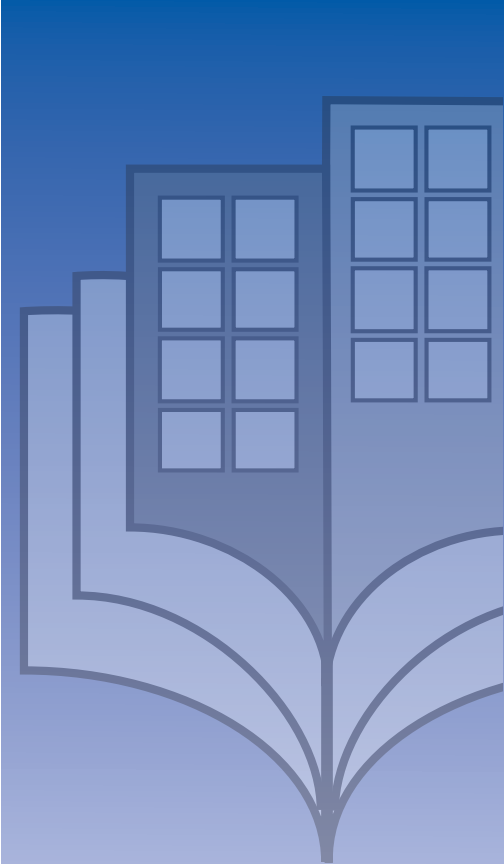**CC:** What got you interested in teaching for the Code Academy?

David: Teaching electrical code and installation /inspection technique developed into a passion through my years of instructing in the VECAP electrical apprentice program. The Code Academy gives an instructor the opportunity to share knowledge with people from across the state, which was very appealing. It looked to be a lot of fun while serving the truly important cause of electrical safety. I will say that this has definitely been the case.

CC: When did you start teaching for code academy?

David: I began teaching for the Code Academy on a regular basis in 2001, shortly after developing the "Humphrey Wall" and joining the curriculum development committee for electrical inspection training.

CC: What have you taught for the Code

Academy?

David: The classes I have taught for the Code Academy consist of electrical inspection training based on the National Electrical Code.

CC: What do you consider to be the most important elements that you incorporate into your teaching?

David: The most important element is interaction with the students. Many of us have been to classes where an instructor read to us off a projection screen. Often you find such instructors have never done the type of task they are attempting to teach and are not really concerned with the students input. I like to involve the class by getting thoughts and opinions as well as the general input of all. Talking about why we perform certain tasks not just what the code says is important. We generate some highly interactive and engaging discussions and I believe that's where the learning really takes place.

CC: What keeps you interested and motivated to teach for the code academy?

David: The opportunity to meet new people and help them get started in the electrical inspection arena is a prime motivator for me. With each class, I also feel like I am making a difference with regards to electrical safety in Virginia.

CC: What advice would you give to individuals who have just started to teach or aspire to teach for code academy?

David: The best advice I can give is to always remember that the people in the room with you each bring their own skills and talents to the class with them. Tap into that wealth of experience and talent. Also, it is important to talk to people, not at them. Lastly, prepare well and make the classroom experience fun for all.

James T. Moore: Plumbing Inspection Training

Background: James T. Moore serves as a Master Combination Inspection Supervisor for Fairfax County, Virginia. His employment encompasses more than 20 years with Fairfax County, 12 years as a plumbing contractor, and 5 years with the United States Navy. Jim is a member of the Virginia Plumbing and Mechanical Inspectors Association, the Virginia Cross Connection Control Association, and the ICC. His teaching experience has included instruction for the Virginia Building Code Academy, DHCD Code Update Training, Fairfax County Building Code Academy, Prince William Code Academy, Virginia Department of Health Backflow

Prevention Schools, VPMIA, VCCCA, BOCA Annual Code Development and Educational Conference, Plumbing Heating and Cooling Contractors, and Plumbing and Mechanical Professionals of Virginia. His organizational and technical leadership positions include Past President of the Virginia Cross Connection Control Association; Current VCCCA District Director and Regulatory Chairperson; Past Code Change Committee Chairperson for Virginia Plumbing and Mechanical Inspectors Association; Past VPMIA representative on the Building Code Academy Advisory Committee; Past VPMIA Education Committee Chairperson; Past BOCA representative on the CABO Plumbing Code Committee and member of the BOCA Code Interpretations Committee.

Code Connection (CC) Interview Questions

CC: How did you get started in the construction and code enforcement arenas?

Jim: Upon returning from Vietnam and discharge from the service, I started working for a plumbing contractor on a short term basis which after finding that I liked working in the plumbing trade, turned into 12 years of learning about good and bad plumbing. While working in the plumbing field with the various inspectors, I was encouraged to apply for a position in the inspection department at Fairfax County and found code enforcement to be interesting and a challenge. Over more than 20 years, I have found that every time you think you know everything about the code, you find you always need to know more and can never have enough training to do your job. It's akin to that old saying: "Just when I knew all the answers, they changed all the questions".

CC: What got you interested in teaching for the Code Academy?

Jim: I had taught in-house classes for Fairfax County and classes for the Virginia Department of Health and found training to be interesting and rewarding. I received a call from Charlotte Carter with the Virginia Building Code Academy who asked if I would be interested in teaching the plumbing module for the Code Academy and in developing the class. The experience of the beginning classes and where the modules have evolved has been a challenge that rewards the participants, but also makes the instructors better at their job.

CC: When did you start teaching for the Code Academy?
Jim: Not sure? I think it was in the early 90's.

CC: What have you taught for the Code Academy?

Jim: Plumbing Module- Residential and Commercial

CC: What do you consider to be the most important elements that you incorporate into your teaching?

Jim: Keep it simple!!! Start with the basics and gradually proceed to the more complicated areas. As an instructor, I think you should make the students feel eager and safe to participate in the class. Leave no questions unanswered and follow up if necessary at a later date. The use of visual aids such as digital images, hands on materials (plumbing walls), and demonstrations bring a class to life and is much better than a lecture based class.

CC: What keeps you interested and motivated to teach for the Code Academy?

Jim: The responses from the participants who say they have learned something that they can take back with them in order to make good inspections while doing their job. Working with other instructors from around the state and the class participation also keeps my knowledge up to date.

CC: What advice would you give to individuals who have just started to teach or aspire to teach for the Code Academy?

Jim: Thoroughly know the subject matter and the code and keep personal opinions to a minimum. Relate to the participants and keep the class interesting, focus on the subject and not yourself. In a word, be student-centered, not instructor-centered!

Commendations and Conclusion:

The Training and Certification Office/Virginia Building Code Academy wishes to take this opportunity to convey to Guy Tomberlin, David G. Humphrey, and James T. Moore our highest level of appreciation and commendation for the leadership that each of you have demonstrated in transforming the training delivered by the Virginia Building Code Academy from code "reading sessions" to the current, highly effective task-based, job-based training sessions in the disciplines of 1) Mechanical inspection training; 2) Electrical inspection training; and, 3) Plumbing inspection training. Your many, many hours of dedicated instruction and curriculum development have proven to be a highly positive transformation. You are each a VBCA Most Valuable Instructor (MVI). I am sure there are hundreds of students throughout Virginia who would like to join us in commending you for your contributions to their training and to their ability to do their jobs. Moreover, because of you and others like you, we recently received a letter from a Building Commissioner stating that they "have noticed over the last five years that the training modules held by (TCO) ... have improved tremendously. (TCO) and staff (such as Guy, David, and Jim) have done a wonderful job of improving the training and should all be commended for their hard work and dedication. Guy, David, and Jim, for all that you have done and continue to do you deserve a Virginia Building Code Academy "Gold Star". Thanks!!!

Logical Decision Making For Code Enforcers

By John Catlett, CPCA, CBOA, MCP
City of Williamsburg Codes Compliance Administrator

Although it should be the goal of any code enforcement department to have any and all possible code interpretation scenarios covered by policies, it is impractical to assume that this can happen. When an issue is not clear in the written code, covered by written policy,

Logical Decision Making For Code Enforcers

or if a modification has been requested, the following guidelines can be useful in providing a satisfactory code based decision and should help you avoid the "appeals" game.

Before anything else, ask yourself the following questions:

1. Is the decision an interpretation or policy? Interpretation normally deals with technical issues and not administrative ones. There are a few exceptions though. For example, a permit is processed for some unusual project that is not covered in the permit fee schedule. To issue the permit, one must interpret the intent of the fee schedule and determine a fee. This is an administrative act, but requires interpretation, not policy. On the flip side, issues such as acceptance of third party reports, response to an information request, and alike should be handled by policy. If it is a policy like decision that must be made, additional consultation should take place before an outcome is determined. I'll cover more on that process later.

2. Is there a written policy? The code official or their designee should take the time to reduce complex issues that require additional consideration to policy. Written policies should be applied as the norm instead of the exception. Judgment must also be utilized to see if the policy fits a specific application. If it does not, utilize other resources to modify the policy on a case-by-case basis, but be able to defend why it did not apply.

3. Have you read the code section in question? Most code, procedural, or administrative questions can be answered by simply reading the code section that applies. Many times people make the wrong decisions simply because they fail to open the book. Don't depend on your past knowledge of the code as many times we get caught when a newer code has a different requirement, but we have failed to check before giving an answer. Don't forget the associated state law provisions that are not in the code. That's where you find statute of limitations, code adoption issues, and professional designer requirements.

4. You have read the code, but have you checked to see if there are any amendments by the state? Again, many times we look past the obvious. After reading the nationally referenced code you still feel it "just ain't right". That could be because Virginia has modified the section or

has adopted a national supplement. It is stuck in that "gray matter" behind your eyes, but you need that trigger of seeing it. Always check the USBC for amendments before giving an answer.

5. Will the outcome of my decision set policy? This practice should be discouraged without having the code official involved, but sometimes it cannot be avoided. Every scenario cannot be anticipated and the boss also needs training and vacation. Should this situation arise, decisions must be made in a timely manner. Utilize the information contained in the rest of this document to help formulate a decision. Once you have and you are not the code official, make sure that they are aware of your action so it can be reviewed and placed into a formal written policy if applicable.

6. Don't forget the "Three Resource Rule". Be thorough and don't shoot from the hip. This should be how we operate on everyday code enforcement issues. However, with any contested situation, unusual code interpretation, or administrative act that is not covered by policy, it is imperative that you utilize at least three other reliable resources before making your final decision. Why three? Let's face facts here. If the answer were obvious, it probably would not be contested or considered unusual. Hopefully two of the three resources agree. If they don't, look for a few more and find common elements between them. This is good practice for the formulation of any code interpretation or administrative policy.

7. Has the spirit and intent of the code been met for a modification? Don't forget that USBC Section 109.2 states that when considering modifications, the spirit and intent of the code section being modified must be observed and the health and safety of the public be assured. Modifications are not variances of code allowing the code provisions to be waived. On the other hand, don't be afraid to issue modifications. It was once said that considering and issuing modifications should be like evaluating a new concept or design. The unknown author said, "Don't prohibit the person who builds mouse traps from building a better, more efficient one." Sometimes the code lags behind technology and newer concepts and a modification is the best answer. Evaluate each situation on its own merits and look for "outs" the code gives you for existing buildings, historic structures, equivalent materials and methods, etc...

8. Don't make it up as you go. There is nothing more embarrassing than telling someone that they must do something, only to find out that there is no code based reason for them to do so. Remember that code enforcement is exactly that, enforcement of the code! There can be no room for personal likes and dislikes of a material or method. The best way to make sure this does not happen is to read the code, especially when you are not out on the inspection and you have the time to digest its content. Don't depend on classes on specific subjects or "code change" sessions to keep current. With each code cycle, there can be several hundred significant code changes and many are not mentioned in training. Many times they can save the customer significant amounts of money. Remember that building materials, cost of land and labor cost have all skyrocketed. The USBC tells us in Section 101.4 that the USBC is there to insure safety, but at the "least possible cost."

9. What resources should I consider and why?

a. The nationally adopted code and the Virginia Amendments: This should be our first source for any code related question.

b. The Code Commentary for the code in question: These provide insight and background to the code. Although these should not be considered "gospel" and do not carry the weight or recognition of the code text, they should be utilized to learn intent.

c. Virginia Technical Review Board Interpretations: TRB interpretations are binding and become part of the code not just for the person making the request, but for the entire state. It is not only a good idea to refer to these when working an interpretation or policy, but you should have knowledge of them for the day-to-day enforcement of the code. They can be accessed through the VBCOA web site's link page or the DHCD web site. If time allows, consider requesting a TRB or ICC technical interpretation.

d. ICC official interpretations: Although not binding and not considered official in Virginia, these are good sources for intent and national application. Copies can be obtained by code year interpreted through the ICC for a minimal fee.

e. Referenced standards found in the code: We sometimes fail to remember to check the referenced standards the code directs us to. The specific documents and section numbers become a part of the code and are enforceable in the same manner as code text. Many times the answer to our question is in the referenced standard, not the code text. Most building departments find it impossible to fund purchases of all the required referenced documents. You might want to try this. Find out who in your area may already have the various standards that you need. Develop a list and keep it handy. Many engineers have the ASTM, ACI, and other standards and will be glad to share them with you should you need them. Better yet, build partnerships with your neighboring code officials and your local design professionals to help spread your resources. Find out what is already available in your area, then work a plan so that various partners purchase them and make them available to each other

f. Other nationally recognized codes and standards: USBC Section 109.2 specifically notes that the code official may utilize newer additions of

nationally recognized codes for a basis for modifications. Section 114 indirectly gets you there for the approval of equipment and materials.

g. Utilize the Department of Housing and Community Development: DHCD has an excellent, professional staff that is there to help you. They not only can give you another opinion, but also have contact with what is happening across the state. They can be reached by calling (804) 371-7150.

h. Contact the ICC. This is a great source for an interpretation on any of the model codes that Virginia adopts. You can call them at (888) 422-7233. When you call, have your membership number ready. Tell the operator you have a question regarding a specific code and they will get you in touch with a staff engineer. Remember! ICC can only give interpretations of the model codes and not Virginia amendments. They would be a very limited resource in dealing with Virginia administrative issues.

i. Contact other building officials and inspectors. Utilize the experts that surround you. For example, one locality near you sees more retail and manufacturing development, while another one is booming with residential activity. With these higher levels of activity comes greater knowledge and experience that you can tap into.

j. Talk with architects, engineers, and contractors. Utilize the expertise and experience around you. Professional designers are trained to look at code issues. Experienced contractors have "been there and done that." It is important to remember that this group is part of the team to insure safe buildings and they are normally happy (sometimes flattered) to assist you.

k. Ask the contractor for the installation instructions. When dealing with a listed piece of equipment, the installation instructions are as important as the code. Unless the code specifically has a more stringent requirement, the manufacturers listed installation instructions rule.

l. Utilize trade groups, periodicals and other publications. Some outstanding code questions can be answered in the IAEI Magazine, Journal of Light Construction, ICC Bulletins and Magazines, etc.... I keep the most recent at arms reach.

m. Utilize the Internet and/or direct contact with manufacturers, suppliers, and testing/listing agencies. Several questions have been answered by sending a simple email to the provider of a product through their web site or by making a phone call to the manufacturer. Utilize resources like UL and other testing/listing organizations. The VBCOA, VPMIA, IAEI, VFPA and ICC Message Boards are another excellent source. Don't forget the I Codes Evaluations Services available on their web site.

n. Utilize one of the many resources commercially available. Develop a good resource library by purchasing a couple of books each year. There are several good reference books on all the trade areas. There are resource and classroom books and guides on all subjects available from the ICC. Many of these are specific topic books like "Solving Egress" or "Non-structural plan review." I would recommend that every office have an illustrated construction dictionary and a Black's Law dictionary.

Many times field inspectors become dependent on immediately asking someone else for answers to code questions. It is OK to say, 'I don't know the answer, but I'll get back to you as soon as I can." Don't get trapped. Take the time to do the research. You are empowered by the USBC to make decisions on a day-to-day basis. Your first step in any code related question should be to follow the "Three Resource" process noted above or at least making sure that your answer is an "educated" one. This builds strong research skills, makes you a better decision maker, and best of all reduces your dependence on others by making you a self-thinker! The more you do it, the simpler it becomes. Your customers will thank you for it!

The Best Yet

By Daniel Y. Gilham, Manager DHCD Training and Certification Office

A new amusement devices/rides inspection training module has been developed by the Virginia Building Code Academy. This module was developed in partnership with a team of world-class amusement ride inspectors and instructors. Delivered for the first time in Charlottesville, Virginia, April 11 – 14, 2005, this training module was characterized on the end-of-course evaluation form by one student as the "best yet". Specifically, this student stated that "All of our code academy classes are very good. This

is the best yet. The "walls" are better than ever; however, this is a "hands on" class. We see it, touch it, discuss it, and even get dirty!" Moreover, all student evaluations of the module were positive as evidenced by a rating of the instructors at a 5 + level, on a scale of 1 (Lowest) to 5 (Highest). One student stated that "The rating of 5 (the highest on the rating scale) does not do this class justice."
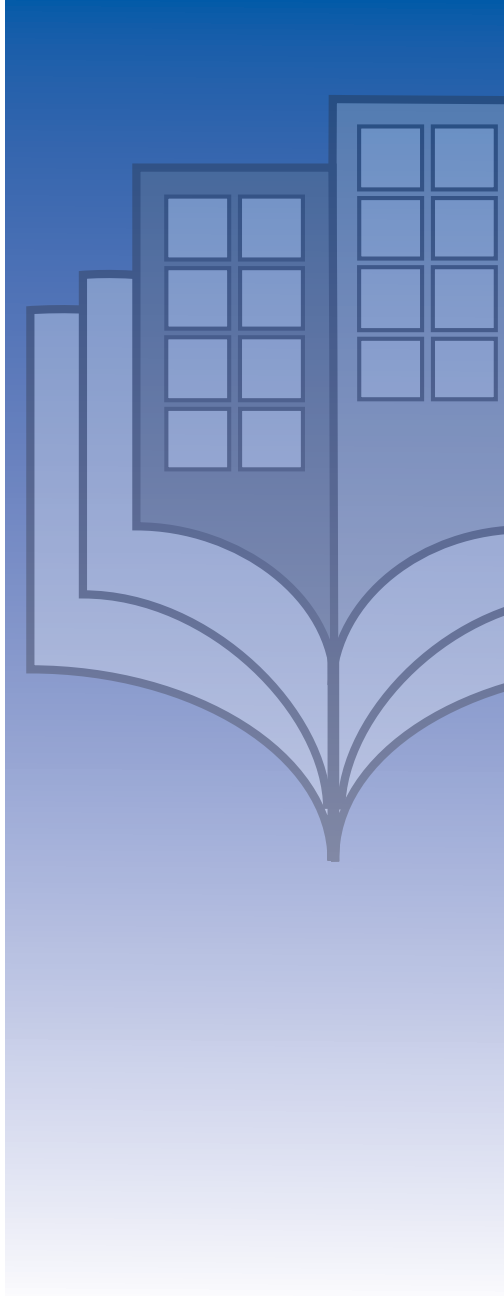
The positive results and commendations regarding this module are a direct result of the expertise of the Code Academy's instructional team, including three nationally recognized, world-class inspectors from other states, and two world-class inspectors from Virginia. These instructors, affiliated with the National Association of Amusement Ride Safety Officials (NAARSO), included Danny Abner, North Carolina, NAARSO Level 1; Carl Dills, Kentucky, NAARSO Level 3; Dan Dudley, Maryland, NAARSO Level 3; Terry Moore, Virginia, NAARSO Level 1; and, Jim Tyer, Virginia, NAARSO Level 1.

The content of the new module encompasses the foundation knowledge and hands-on skills needed for initial training for new amusement devices/rides inspectors, and refresher training for veteran amusement devices/rides inspectors. This training is also of great benefit to Building Officials who supervise amusement devices/rides inspectors and to those who have to know how to hire competent third-party amusement devices/rides inspectors. The content of the module is delineated by instructional topic as follows:

1. Authority for conducting inspections in Virginia (Update)
2. ASTM F-24 (Update)
3. Safety for inspectors, operators and riders
4. Lock-out/tag-out
5. Ride recognition and ride manufacturers (Update)
6. Inspection guidelines and checklists
7. Hands-on field inspections of amusement rides/devices (NOTE: 16 of the 32 hours in this module are allocated to hands-on inspection of amusement devices/rides in the field, utilizing by prior approval the rides of a traveling carnival).
8. Electrical systems, generators and grounding
9. Mechanical systems incorporated in amusement rides/devices
10. Hydraulics/pneumatics for inspectors
11. Inflatables/dark rides
12. Blocking and anchoring
13. Fencing/access and egress
14. Non-destructive testing (NDT)
15. Wire rope
16. Fasteners
17. Height, age or weight restrictions
18. Go-karts
19. Water parks
20. Carnival vocabulary/terminology

Based on their wide-spread national knowledge and experience, the consensus of the Code Academy instructional team is that Virginia's new module constitutes the best training in amusement devices/rides inspection in the United States. Moreover, the instructors who are all affiliated with the National Association of Amusement Ride Safety Officials (NAARSO) plan to propose to NAARSO that Virginia's new

amusement devices/rides inspection training module be utilized as the paradigm for conducting training for inspectors at the annual NAARSO Training and Education Forum.

Permit Technician's Pilot Training Program

By Daniel Y. Gilham, Manager, DHCD
Training and Certification Office

The Virginia Building Code Academy in partnership with VBCOA Region III has designed and developed a permit technician's training program for individuals who staff the front desks/counters in building departments. The precursor to the design and development process involved analyzing and documenting the job duties and tasks of the occupation. The Permit Technicians involved in the job analysis/task analysis included:

- Julie Davenport, City of Staunton
- Donna Hoke, Page County
- Tammy Hoyt, Augusta County
- Julie Kline, City of Harrisonburg
- Debbie Layman, Frederick County
- Pam Lohr, City of Harrisonburg
- Paula Whited, Warren County

The facilitators were Dan Gilham, DHCD Training and Certification Office, and Jud Baldwin, Building Official, City of Harrisonburg.

The information generated through the job analysis enabled the participants to isolate the duties and tasks for which: 1) No training was needed; 2) On-the job training (OJT) was the most relevant/cost-effective method; and, 3) Formal classroom training was required. Lastly, the needs for formal training were identified and prioritized as follows:

1. *Customer Service*
2. *Freedom of Information Act (FOIA) Requirements*
3. *Licensing Requirements Established by DPOR*
4. *Permits: What and When*
5. *Records Retention and Disposition Requirements*
6. *Preparation and Assembling of Information for Boards and Commissions*
7. *Meeting Minutes - Taking and Reporting*

After prioritizing the needs for formal training, an outline for a Permit Technician's training program was established as follows:

Day One Training Topics	Time Allocation
1. Customer Service	4 hours
2. Freedom of Information Act (FOIA) Requirements	2 hours
3. Licensing Requirements and Authorization to Do Work Established by DPOR	2 hours

Day Two Training Topics	Time Allocation
4. Permits: What and When	2 hours
5. Records Retention and Disposition Requirements	2 hours
6. Preparation and Assembling of Information for Boards and Commissions	2 hours
7. Meeting Minutes	2 hours

The first pilot training program for Permit Technicians was scheduled to be conducted in Harrisonburg, Virginia, June 20 – 21, 2005. As a pilot program developed by VBCOA Region III, it was decided to "test pilot" the program using students from that region. Moreover, because it was a pilot, the class size was limited to 20. It is anticipated that this pilot program will prove to be relevant and beneficial to the job performance of all Permit Technicians. If this proves to be the case, plans are to offer the program to all Permit Technicians in Virginia.

In summary, the Training and Certification Office plans to provide support to training for Permit Technicians. The elements of this support will encompass: 1) Completion of the Code Academy's core module; 2) Completion of the new Permit Technician's Training Module; and, 3) Passing of the ICC Permit Technician's National Certification Examination. Completion of these three items would, if approved by the Board of Housing and Community Development (BHCD), lead to state certification. In pressing forward with this plan, TCO expects to contribute to: 1) Standardization of the profession in Virginia; 2) Recognition of the value and contributions of Permit Technicians; and, 3) Improvement in the capability of Permit Technicians throughout Virginia to better serve their jobs, their jurisdictions, and their customers.

BE PART OF HISTORY.

For the first time ever, three major segments of Virginia's building safety community are coming together to address citizen safety issues. Members of the Virginia Building and Code Officials Association (VBCOA), Virginia Fire Prevention Association (VFPA) and Virginia Plumbing and Mechanical Inspectors Association (VPMIA) will conduct a series of meetings and training seminars at the new Hampton Convention Center in Hampton, Virginia from October 21 through 24. At this joint conference we will promote uniform application and interpretation of the building codes and standards currently used in the Commonwealth, resulting in enhancement of the health, safety, and welfare protection for the public. *Be part of this historic event.* Your participation is important in making Virginia a better place to live, work, and visit.

For more information visit these web sites:
www.VPMIA.org, www.VBCOA.org and www.VFPA.org

2005

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JOINT CONFERENCE • HAMPTON, VIRGINIA

OCTOBER 21– 24, 2005

VBCOA, VFPA, and VPMIA are Chapter Members of

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A PUBLICATION BY THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT - DIVISION OF BUILDING AND FIRE REGULATION

Jack A. Proctor Virginia Building Code Academy Schedule of Classes September – December 2005

Department of Housing and Community Development
Training and Certification Office
501 North Second Street
Richmond, Virginia 23219
Telephone: 804/371-7180   Fax: 804/371-7092

This schedule sheet MUST accompany your application.

Important Notice !!
Check the box of the preferred class.

Check (only one)	Date	Module	Location	Application Deadline
	Sept. 12-13	Plan Review Structural	Courtyard Marriott -Charlottesville, VA	Aug. 15
	Sept. 14-16	Electrical Inspection	Courtyard Marriott -Charlottesville, VA	Aug. 16
	Sept. 20-22	Mechanical Inspection	Southwest Higher Ed Center -Abingdon, VA	Aug. 22
	Oct. 4-6	Advanced Official	Sheraton Park South -Richmond, VA	Sept. 6
	Oct. 12-14	Property Maintenance	Airfield Conference Center -Wakefield, VA	Sept. 14
	Oct. 18-20	CORE	Piedmont Community College –Charlottesville	Sept. 19
	TBA (Tentatively November)	Amusement Devices Inspection – Parks	Kings Dominion -Doswell, VA	Sept. 26
	Nov. 1-3	Fire Protection Systems Inspection	Wingate Inn – Fredericksburg, Virginia	Oct. 3
	Nov. 7-9	Building Inspection	Sheraton Park South -Richmond, VA	Oct. 10
	Nov. 15-17	Plumbing Inspection	Southwest Higher Ed Center -Abingdon, VA	Oct. 17

Jack A. Proctor Virginia Building Code Academy
APPLICATION FORM

Do not forget to submit the schedule page showing which class you applied for.

Please fill out this application completely to be considered for a VBCA module

1. **Class Selection**: Mark the one class on the schedule list that you wish to apply for – do not modify the form. A separate application is required for each class you wish to attend.

2. **Applicant information**: (print or type)
   Name: _____ Title:_____
   Employer:_____ Business mailing address:_____
   City:_____State:_____Zip:_____
   Business telephone:_____ Driver's Lic. #: _____

3. **Applicant's position description**: Position title: _____
   Number of years in this position:_____Number of years in code enforcement/administration:_____
   What is your primary responsibility as it relates to the USBC/VSFPC?_____

4. **Certification Plans**:
   A. Date you attended the CORE Module: _____
   B. Have you previously been denied attendance to the class for which you are applying due to a lack of space? (Check box) ☐ Yes   ☐ No
   C. Will you be seeking certification within the next twelve months? ☐ Yes   ☐ No
   If you answered "yes", please list in priority order the Categories of Certification you will be seeking.
   1._____ 4._____
   2._____ 5._____
   3._____ 6._____

   D. If you have a provisional certification, please list the category of certification and its expiration date: _____Expires:_____

IMPORTANT NOTE TO APPLICANT: The preceding Sections 1 through 4 must be completed in their entirety by you, the applicant. Section 5 must be completed by the local Code Official. Failure to complete the form or to provide adequate information may cause the form to be returned without further action towards accepting the application.

5. A.   **Code Official's Endorsement**: (NOTE: The "Code Official" as defined in the VUSBC/VSFPC.)

Name (print or type):_____
Title:_____
Business mailing address:_____City:_____State:_____Zip:_____
Telephone number: (   ) _____ E-mail address (if applicable):_____

B. Code Enforcement: Is the applicant presently enforcing that portion of the code that is directly related to the class being applied for? (check box)
         ☐ Yes   ☐ No   Initials of Code Official:
C. Prioritization of Applicant(s): Applications are often received from more than one individual for the same class representing the same jurisdiction. As the Code Official, please prioritize this applicant, as compared to any other applicants from your jurisdiction, to this particular class, based on the greatest need you have. Please indicate whether this should be considered your 1st choice, 2nd choice, 3rd choice, etc.

Ranking:_____   Initials of Code Official:_____

- -

Statement
(The applicant and Code Official must both read and sign the statement below. Notice to attend and a copy of the class rules will be sent to each participant subsequent to application acceptance.)

We understand that for a participant to receive credit for any module of the Virginia Building Code Academy, they must attend the entire module. Participants will not schedule any regular work activities during the period of the Code Academy. Course work missed due to personal or work related emergencies must be made-up prior to receiving credit for the course. If a participant cancels less than one workday prior to class, or does not arrive for the first night's lodging, their jurisdiction will be invoiced for the one night's lodging. If a participant does not use lodging arrangements requested of and provided by the Academy, the jurisdiction will be charged for all lodging costs not utilized.

Code Official's signature: _____

Applicant's signature: _____

There are no fees for participants attending the Virginia Building Code Academy who are engaged in code related work for local or State agencies that participate in contributing 1.75% levy funds in accordance with § 36-137(7) of the Code of Virginia. Others will be required to pay tuition based upon an established schedule of the particular class. Participants must provide their own transportation and <u>bear all associated cost such as tolls and parking fees</u>. Living arrangements and meals will be provided in accordance with Code Academy policy and all classroom materials will be provided. Due to the limited number of spaces for all Code Academy classes, acceptance to each specific class must be necessarily limited. Each applicant will be considered on a case-by-case basis. Participants in academy classes will be assigned double occupancy rooms with another participant. If other lodging arrangements are desired, participants must make their own arrangements. If you have any questions, please do not hesitate to contact the Training and Certification Office at 804-371-7180 or through facsimile at 804-371-7092.

Mail application to:
Training and Certification Office
Division of Building and Fire Regulation
501 North Second Street
Richmond, Virginia 23219

NOTATION ON DUE DATES: Applications for individual classes will not be accepted after the "application deadline" date listed on the schedule of classes.

Department of Housing and
Community Development
The Jackson Center
501 North Second Street
Richmond, Virginia 23219

Code Connection Subscription

"Code Connection" is published by the Department of Housing and Community Development. The purpose of the publication is to keep interested parties aware of events on the state and local levels. The newsletter addresses training schedules, interpretations by the Technical Review Board, and articles of interest to building and fire-prevention professionals.

"Code Connection" may he sent to you for a yearly subscription of $12. Please make checks payable to: Treasurer of Virginia and mail to: DHCD, Training and Certification Office, 501 North Second Street, Richmond, VA 23219.

Name_____

Company_____

Address_____

City_____State _____Zip_____

Telephone_____Email_____